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- c) a support body on which the abrasive flaps are fixed; and
- d) a device for connecting the flap-type grinding tool to a drive apparatus, wherein the support body has at least one rotationally symmetrical lateral surface on which the abrasive flaps are at least partly fixed, and wherein the support body comprises at least one central element configured as a disk which extends essentially radially to the axis of rotation and the device for connecting the flap-type grinding tool to a drive apparatus has at least one contact surface formed by the disk for connecting the flap-type grinding tool to a drive apparatus and the support body further comprises a carrier ring on whose radially outermost outside one of the lateral surfaces is formed approximately parallel to the axis of rotation or at least inclined at less than 75 degrees to the axis of rotation.

20. The flap-type grinding tool of claim 19 wherein the disk is sufficiently angled in the region of the contact surface such that the contact surface is disposed axially outside a body of rotation described by the outside edges of the abrasive flaps.

21. The flap-type grinding tool of claim 19 wherein the disk is produced from a material wherein the material is selected from the group consisting of plastic, fiber-reinforced plastic, aluminium, steel, and combinations thereof.

22. The flap-type grinding tool of claim 19 wherein the carrier ring is produced from a material wherein the material is selected from the group consisting of plastic, fiber-reinforced plastic, hard rubber, hard paper, aluminium, steel, and combinations thereof.

23. The flap-type grinding tool of claim 19 wherein the carrier ring and the disk are produced from different materials.

24. The flap-type grinding tool of claim 19 wherein the carrier ring and the disk are connected to one another wherein the connection is selected from the group consisting of press-fitting, bonding, welding, and combinations thereof.

25. The flap-type grinding tool of claim 19 wherein the disk is formed by an automatically acting clamping apparatus wherein the clamping apparatus is selected from the group consisting of an eccentric clamping apparatus and a centrifugal clamping apparatus.

26. The flap-type grinding tool of claim 19 wherein the support body has a plurality of disks.

27. The flap-type grinding tool of claim 19 wherein the abrasive flaps are disposed both on the periphery and on one end face of the flap-type grinding tool.

28. The flap-type grinding tool of claim 19 wherein the support body has a device for connecting the flap-type grinding tool to a rapid clamping apparatus which is used for connecting the flap-type grinding tool to a drive apparatus.

29. The flap-type grinding tool of claim 28 wherein the device for connecting the flap-type grinding tool to a rapid clamping apparatus is adapted to form part of a connection wherein the connection is selected from the group consisting of a socket connection, a bayonet connection, and combinations thereof.

30. The flap-type grinding tool of claim 28 wherein the device for connecting the flap-type grinding tool to a rapid clamping apparatus comprises a screw wherein the screw is selected from the group consisting of a single-pitch screw, a multi-pitch screw, a single-pitch nut thread, a multi-pitch nut thread, and

5 combinations thereof and wherein the thread of such screws is selected from the

group consisting of a coarse-pitched thread, a rectangular thread, a trapezoidal thread, and combinations thereof.

31. The flap-type grinding tool of claim 19 wherein the device for connecting the flap-type grinding tool to a drive apparatus comprises a shaft connected to the support body in a manner fixed in rotation, and the support body comprises a synthetic resin body, in which the abrasive flaps and the shaft are directly
5 embedded, and wherein the support body integrally forms the disk and the carrier ring.

32. The flap-type grinding tool of claim 31 wherein the support body is produced by at least partial casting of a resin wherein the resin is selected from the group consisting of a plastic resin, a synthetic resin, and combinations thereof into a space formed between the abrasive flaps, positioned relative to one another, and
5 the shaft.

33. The flap-type grinding tool of claim 31 wherein the support body comprises at least partially of a paper wherein the paper is selected from the group consisting of hard paper, fiber material, and combinations thereof.

34. The flap-type grinding tool of claim 28 wherein the rapid clamping apparatus is configured to connect the flap-type grinding tool to the drive apparatus.

35. The flap-type grinding tool of claim 19 wherein the disk is configured as a rapid clamping apparatus.

36. A flap-type grinding tool, which is configured symmetrically about an axis of rotation comprising:

- a) an outer portion;
- b) a plurality of abrasive flaps disposed on the outer portion wherein the

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outer portion is selected from the group consisting of a periphery, end faces, and combinations thereof;

c) a support body on which the abrasive flaps are fixed, and wherein the support body has at least one rotationally symmetrical lateral surface on which the abrasive flaps are at least partly fixed; and

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d) a device for connecting the flap-type grinding tool to a drive apparatus, wherein the device for connecting the flap-type grinding tool to a drive apparatus is formed by an automatically acting clamping apparatus wherein the clamping apparatus is selected from the group consisting of an eccentric clamping apparatus and a centrifugal clamping apparatus and the support body further comprises a carrier ring on whose radially outermost outside one of the lateral surfaces is formed approximately parallel to the axis of rotation or at least inclined at less than 75 degrees to the axis of rotation.

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37. A flap-type grinding tool, which is configured symmetrically about an axis of rotation comprising:

a) an outer portion;

b) a plurality of abrasive flaps disposed on the outer portion wherein the outer portion is selected from the group consisting of a periphery, end faces, and combinations thereof;

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c) a support body on which the abrasive flaps are fixed, and wherein the support body has at least one rotationally symmetrical lateral surface on which the abrasive flaps are at least partly fixed, and

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d) wherein said support body is configured to receive a device for connecting the flap-type grinding tool to a drive apparatus by an

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automatically acting clamping apparatus wherein the clamping apparatus is selected from the group consisting of an eccentric clamping apparatus and a centrifugal clamping apparatus and the support body further comprises a carrier ring on whose radially outermost outside one of the lateral surfaces is formed approximately parallel to the axis of rotation or at least inclined at less than 75 degrees to the axis of rotation.--

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